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10/064,998

09/06/2002

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1850

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EXAMINER

COOLMAN, VAUGHN

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

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GROUP 3600

Application Number: 10/064,998
Filing Date: September 06, 2002
Appellant(s): JAURA ET AL.

Jerome R. Drouillard
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08/22/2007 appealing from the Office action mailed 05/01/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

A substantially correct copy of appealed claim 1 appears on page 8 of the Appendix to the appellant's brief. The minor errors are as follows: the word "and" has been interjected at the end of line 7.

A substantially correct copy of appealed claim 9 appears on page 9 of the Appendix to the appellant's brief. The minor errors are as follows: "630 degree" has been previously amended by appellant on 02/26/2007 to read "350 degrees".

(8) Evidence Relied Upon

5,217,085	BARRIE	6-1993
6,670,788	PRABHU ET AL	12-2003
4,284,913	BARNHARDT	8-1981
6,066,060	HARPER	5-2000
5,443,130	TANAKA ET AL	8-1995

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Barrie discloses (see FIGS 1-3) a cooling system for a vehicle powertrain having a motor (28) and a transmission (30 – column 3, line 5) comprising:

said motor having a stator housing;

a cooling loop (shown in FIG 2) in heat conductive contact with said motor stator housing and with said transmission;

said cooling loop comprising a heat exchanger (62 – column 4, line 30) and conduits providing a fluid flow connection between said motor stator housing, said transmission, and said heat exchanger, said cooling loop further comprising a mechanical transmission pump (46 – P1) and an auxiliary pump (52 – P2); and said cooling system further comprising a controller (110 – FIG 3), for receiving and processing input (104 – column 5, line 34) from at least one vehicle sensor (102 – column 5, line 33). Barrie does not disclose the controller commanding said auxiliary pump to operate when the processed input of the at least one vehicle sensor exceeds a pre-selected threshold. However, Barrie does control the valve (106 – column 5, lines 49-53) in response to the input from the vehicle sensor exceeding a pre-selected threshold (Column 5, lines

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45-60). Barrie also teaches, in the embodiment shown in FIG 1, a controller (22 – not labeled in FIG 1) controlling a pump (10, 18) based on vehicle sensor input (24 – column 2, lines 65-68). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system shown by Barrie with the controller as also taught by Barrie, since such a modification would provide the advantage of providing higher flow rates of the coolant in order to more efficiently cool the motor and transmission as well as being able to edit the threshold value easily.

(10) Response to Argument

In response to Appellant's arguments, it appears that Appellant is not arguing against the rejection set forth in the final rejection. Appellant states at the bottom of page 4 that Barrie does not disclose a "cooling loop in heat conductive contact with the motor stator housing and with the transmission". Appellant continuously argues against elements shown in FIG 1 of Barrie, when it has been clearly stated by Examiner in the Final rejection that the rejection is based on the cooling loop of FIG 2 in combination with elements taught in FIGS 1 and 3.

As described in the final rejection of 05/01/2007 and repeated above, Barrie indeed discloses such a cooling loop in FIG 2. Appellant points to Barrie's description of a two circuits, a cooling circuit and a lubrication circuit, as evidence against the rejection. Barrie does show two circuits in FIG 2, but the circuits are in heat conductive contact with each other and employ the same working fluid drawn from the same fluid reservoir (FIG 2 – item 44). Barrie discloses all of the elements of claim 1 in FIGS 2 and 3. FIG 3 is simply an alternate form of valve control wherein valve assembly 84 in FIG 2 is replaced by valve assembly 106 from FIG 3. This is described in detail by Barrie in column 5, lines 29+. Examiner looked to FIG 1 of Barrie simply

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for the teaching of a controller (22) which fulfills the claimed limitation of “commanding [an] auxiliary pump to operate when the processed input of at least one vehicle sensor exceeds a pre-selected threshold”. The operation of Barrie’s pump controller (22), which meets the claim limitation, is described at column 2, lines 65-68 and column 3, lines 1-2. Adding the controller provides the benefit of more precise control of the cooling system when using the sensor output. The more precise control would especially be an advantage when traveling between various hot and cold climates.

Regarding appellant’s arguments on page 5, there appears to be an error in the third line of the first complete paragraph – “contact with motor stator housing (30) and with traction motor (28)”. Appellant also continuously refers to “heat exchanger (40)” when Examiner clearly stated that the heat exchanger being relied upon for the rejection is item 62 from FIG 2 of Barrie.

Appellant’s arguments are not commensurate with the scope of the claim. For example, Appellant states that Barrie lacks any teaching of a “system in which fluid flows serially from a heat exchanger and then through a transmission”. The limitation of serial flow is not recited in independent claim 1.

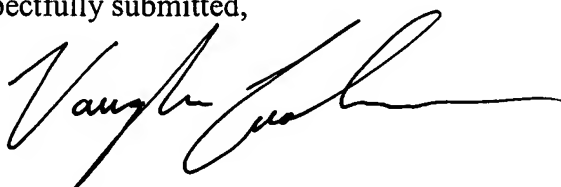
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

vtc



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